

Date: Friday, 2/23/2007 2:00:07 PM
User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: WHEEL SHAFT
Job Number	: 30953		
Estimate Number	: 10449		
P.O. Number	: <i>N/A</i>	Part Number	: D33341
This Issue	: 2/23/2007	S.O. No.	: <i>N/A</i>
Prsht Rev.	: NC	Drawing Number	: D3334 REV. B1
First Issue	: <i>N/A</i>	Project Number	: N/A
Previous Run	: 28621	Drawing Revision	: B1
	Type : MACHINED PARTS	Material	: <i>N/A</i>
Written By	: <i>[Signature]</i>	Due Date	: 3/20/2007
Checked & Approved By	: <i>[Signature]</i>	Qty:	<i>12</i> Um: Each
Comment	Est: B 05.03.02 Revised material; Added Powder Coat K J/JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M4140HR3500	4140 Heat Treated Bar
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Comment: Qty.: 0.6563 f(s)/Unit Total : 5.2504 f(s)
4140 HEAT TREATED BAR

M100011 X6 * unable to enter inventory
M18808 X8

Material: AISI 4140 or ASTM A304-02/A-434-BC/A193-03-Grade-B7/A29-03/A322-91 or UNS# G41400
(M4140H-R3.500) Batch: _____

(14)

2.0	MORI SEIKI	MORI SEIKI CNC LATHE LARGE
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Comment: MORI SEIKI

1- Cut blanks: Ø3.500" Bar to 7.750" long
2- Turn as per Folio FA492 and Dwg D3334
3- Deburr

JA/07/03/01

BC 07.03.02 12

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

JA/07/03/01

BC 07.03.02 12

4.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS1

Machine as per Folio FA492 and Dwg D3334
Identify as D3334-1

JF/JL

07/03/05

12

5.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

JF/JL

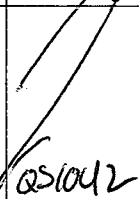
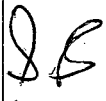


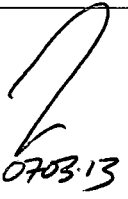
07/03/05

12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ ☐ Date: 07/03/19

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07-02-28	2	1 PC Threaded u/s 1 pc shaft ϕ u/s wrong tool offset	 QS1042	Tools set properly Scrap parts used for future set up. Replaced. / Destroyed	07-02-28  SB	 070313	 QS1042	 070313

NOTE: Date & initial all entries

Date: Friday, 2/23/2007 2:00:08 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WHEEL SHAFT

Job Number: 30953

Part Number: D33341

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC8

SECOND CHECK



Comment: SECOND CHECK

mk 07/03/13

12

7.0

POWDER COATING

POWDER COATING



M180 S2



(12x)

Comment: POWDER COATING

Powder Coat Fire Red (Ref: 4.3.5.10) as per QSI 005 4.3

Mask thread and bearing surface

mk

07/03/15

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

Boyle 03/16 (12) H

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

Boyle 03/16 (12) H

10.0

QC21

FINAL INSPECTION/W/O RELEASE



(12)

Comment: FINAL INSPECTION/W/O RELEASE

07/03/19

Job Completion



UL 07-03-19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 30953
Description: Wheel Shaft		Part Number: D3334-1
Inspection Dwg: D3334 Rev: B1		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

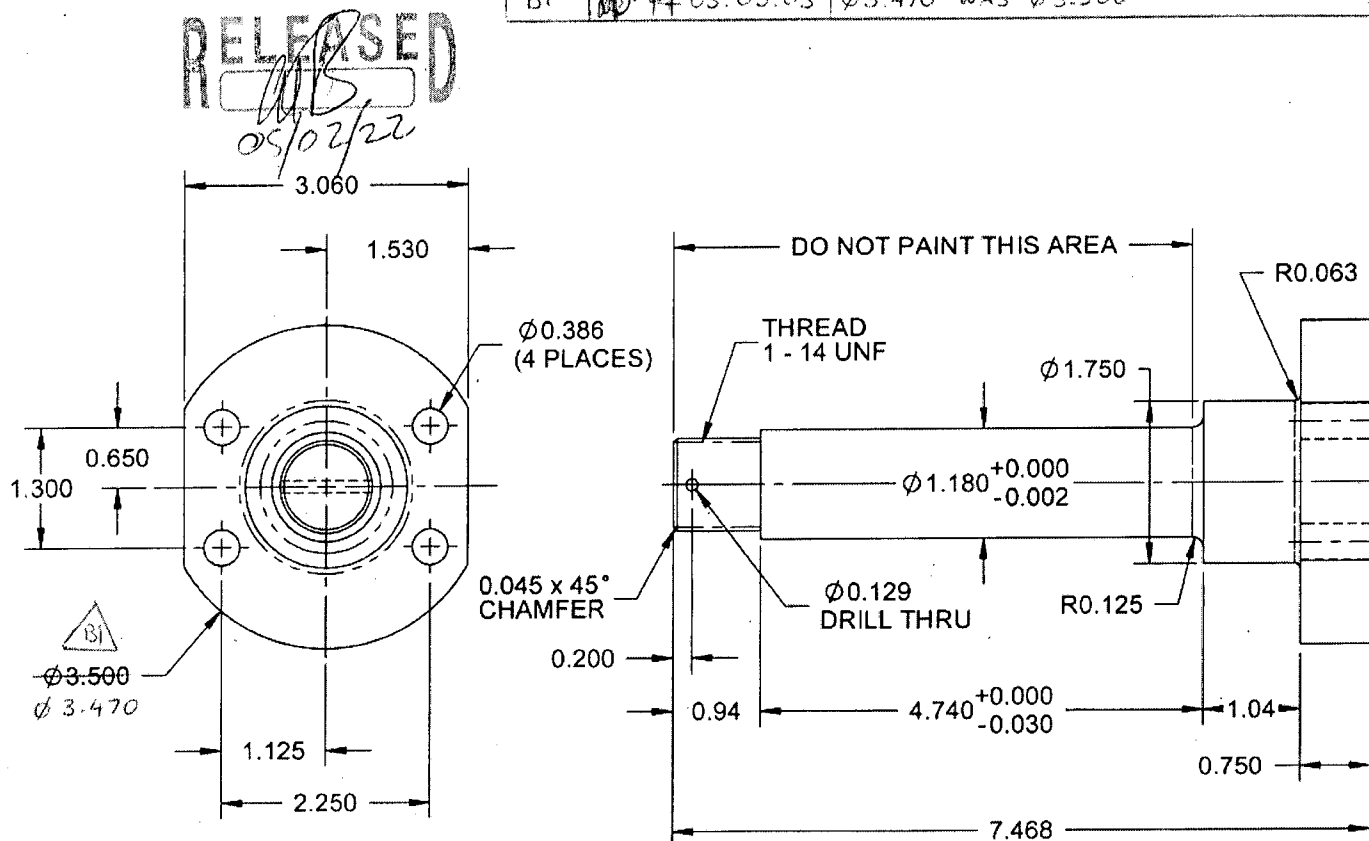
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
7.468	+/-0.010	7.469	✓			
0.94	+/-0.030	.943	✓			
0.200	+/-0.010	.202"	✓			
Ø0.129	+0.005/-0.000	Ø.131"	✓			
4.740	+0.000/-0.030	4.725	✓			
1.04	+/-0.030	1.027	✓			
Ø1.750	+/-0.010	1.751	✓			
0.750	+/-0.010	.751	✓			
1.180	+0.000/-0.002	1.179	✓			
2.250	+/-0.005	2.249	✓			
1.125	+/-0.010	1.124	✓			
3.060	+/-0.010	3.060	✓			
Ø0.386	+0.005/-0.000	.390	✓			
1.300	+/-0.005	1.300	✓			
Ø3.470	+/-0.010	3.470	✓			

Measured by: BC/JL/JF	Audited by:	Prototype Approval:	N/A
Date: 07/03/05	Date:	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	05.04.26	New Issue	KJ/JLM	



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3334	REV. B SHEET 1 OF 1
DATE 05.02.18		TITLE WHEEL SHAFT	SCALE 1:2
A	04.12.16	NEW ISSUE	
B	05.02.18	REDESIGN TO FIT NEW WHEEL ASS'Y	
BI	05.03.03	Ø 3.470 WAS Ø 3.500	



D3334-1 WHEEL SHAFT

NOTES:

- 1) MATERIAL: AISI-4140 OR ASTM A304-02/ A-434-BC/ A193-03-GRADE-B7/ A29-03/ A322-91 OR UNS#-G41400 (REF. DART SPEC. M4140H-R3.500)
- 2) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.010 TO 0.020

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. **30953**

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